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**Wiki Assignment #3: Statement of the Problem and Research Hypothesis**

STATEMENT OF THE PROBLEM

There exists research done by professional educators and theorists who posit statements and provide evidence in support of both the inquiry method and direct instruction method of teaching science.

Private school X, located in New York City urban area, has been implementing the direct method of teaching for years. This method has not resulted in significant improvement in the children’s Stanford Examination test scores. It was noted that the children also become teacher dependent.

We strongly feel that merging an inquiry-based curriculum with the direct instruction strategy should help to improve the student’s performance and foster an independent learning style.

RESEARCH HYPOTHESIS

Our research group comprises of fifteen kindergarten children whose reading level is approaching grade 1level. We propose dividing this group of students into three separate groups for their science lessons. The class would be divided into three different independent sections and three teachers will be involved in teaching them simultaneously. The teachers are the children’s original teacher, and the two teachers conducting the research, whom we shall refer to as Teacher K and Teacher S.

Over a period of six weeks, the three teachers will be involved in teaching a planned science unit of work. The three teachers will take turns each week as they interchange in teaching of each group of children. They will be taught for thirty minutes, three days per week. A different method of teaching will be assigned for each group. Group 1 will be taught using the inquiry method. Group 2 will be taught using the direct instruction method and group 3 will be taught using both the inquiry and the direct instruction methods.

A pretest comprising of oral and written questions will be done at the beginning of the six week period. At the end of the six weeks of teaching, each group will be administered a written test comprising of various levels of questioning. Each child will also be tested orally. The scores of this posttest will be compared against the scores of the pretest. The results of the external Stanford Examination of the three groups of children will be compared against each other. These scores will also be compared to previous groups who were taught using the direct instruction method only. A follow up survey will be conducted to determine the extent of dependence or independence of each research group. We hypothesize that the group that is taught using both methods – the inquiry and the direct instruction methods – will achieve greater performance and more independence in learning than the other two groups.